

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P518329

Luminaire Tested: **SQ4-BB-025U-075D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518329  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-025U-075D-835-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

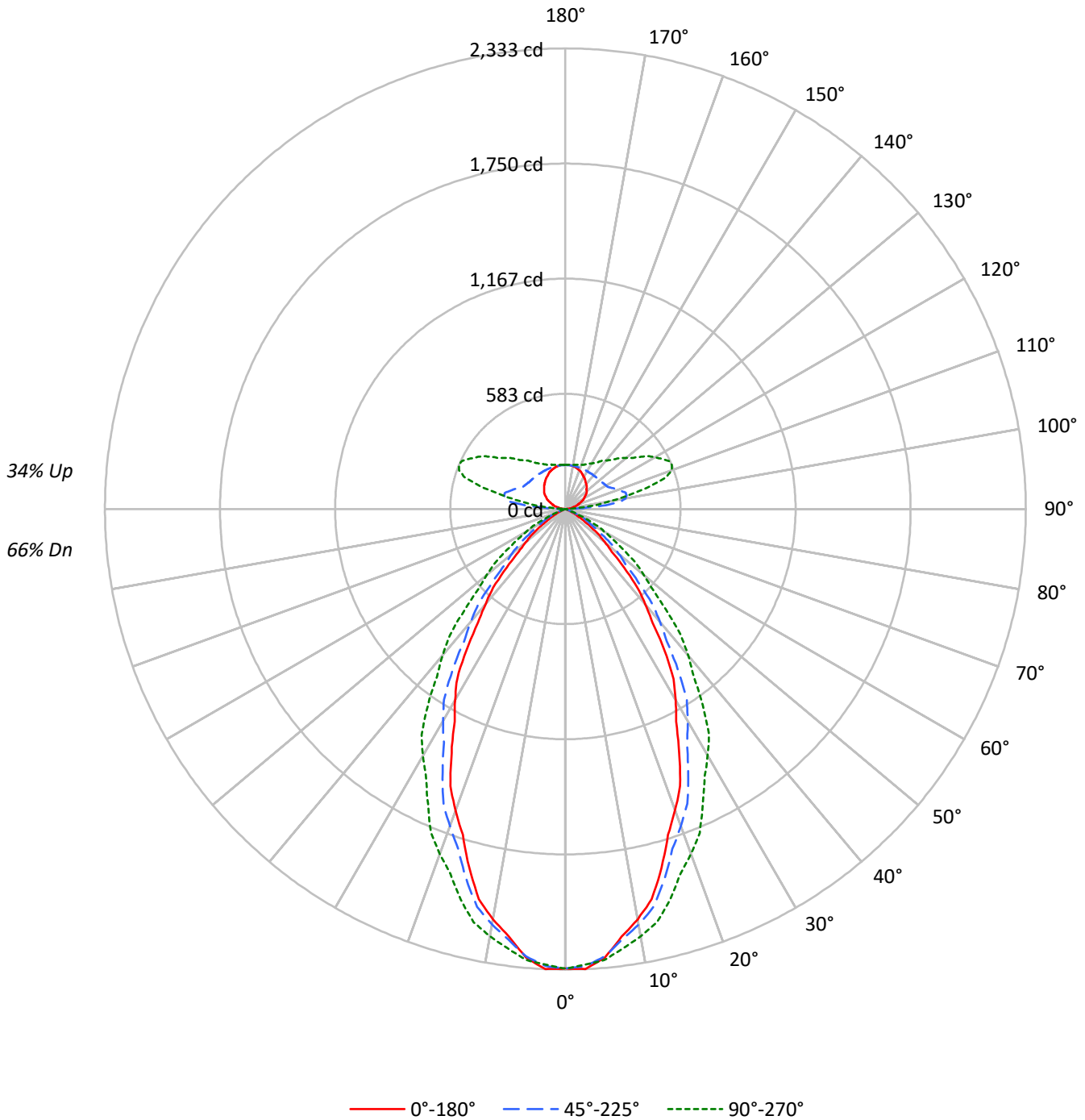
Lumens per Lamp: N/A  
Luminaire Lumens: 4226.8 lumens  
Efficiency: N/A  
Efficacy: 87.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 48.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	104	100	97	94	98	95	92	89	84	82	80	75	73	72	66	65	64	60
2	96	90	85	81	91	86	81	77	77	73	71	69	66	64	61	59	58	54
3	90	82	75	71	84	78	72	68	70	66	62	63	60	57	56	54	52	49
4	83	74	67	62	79	71	65	60	64	59	56	58	54	51	52	49	47	44
5	78	67	60	55	73	64	58	53	59	54	50	53	49	46	48	45	43	40
6	72	62	55	49	68	59	53	48	54	49	45	49	45	42	45	42	39	37
7	68	57	50	45	64	54	48	43	50	45	41	46	41	38	42	38	36	34
8	63	52	45	41	60	50	44	39	46	41	37	43	38	35	39	36	33	31
9	60	48	42	37	57	47	40	36	43	38	34	40	35	32	37	33	31	29
10	56	45	38	34	53	43	37	33	40	35	32	37	33	30	34	31	28	27

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14317	14317	14317
5°	14087	14052	14156
10°	13181	13356	13729
15°	11983	12362	13051
20°	10637	11190	12169
25°	9263	9997	11181
30°	7934	8806	10246
35°	6578	7475	9116
40°	5054	5977	7767
45°	3653	4526	6250
50°	2489	3373	4957
55°	1618	2440	3852
60°	929	1717	2785
65°	246	1049	1409
70°	122	324	405
75°	55	26	0
80°	39	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.4	5.0
10°-20°	543.3	12.9
20°-30°	680.1	16.1
30°-40°	628.2	14.9
40°-50°	422.1	10.0
50°-60°	218.0	5.2
60°-70°	68.3	1.6
70°-80°	4.3	0.1
80°-90°	1.3	0.0
90°-100°	108.9	2.6
100°-110°	286.4	6.8
110°-120°	297.0	7.0
120°-130°	238.2	5.6
130°-140°	186.9	4.4
140°-150°	143.5	3.4
150°-160°	103.3	2.4
160°-170°	63.2	1.5
170°-180°	21.4	0.5
0°-30°	1435.8	34.0
0°-40°	2064.0	48.8
0°-60°	2704.1	64.0
0°-90°	2777.9	65.7
90°-120°	692.3	16.4
90°-150°	1261.0	29.8
90°-180°	1449.0	34.3
0°-180°	4226.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2328	2328	2328	2328	2328	
5°	2282	2258	2276	2284	2293	212
15°	1882	1875	1941	2007	2050	524
25°	1365	1376	1473	1574	1648	626
35°	876	898	996	1113	1214	543
45°	420	445	520	622	718	330
55°	151	176	228	292	359	141
65°	17	32	72	87	97	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	4	12	6	6	1
95°	14	56	188	97	66	16
105°	52	78	317	481	448	55
115°	92	111	254	506	578	91
125°	128	143	231	390	460	113
135°	152	167	224	315	357	118
145°	176	188	221	268	290	110
155°	199	205	221	242	249	92
165°	215	218	221	229	232	61
175°	224	224	222	225	225	21
180°	224	224	224	224	224	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2327.7	2327.7	2327.7	2327.7	2327.7
2.5°	2333.1	2311.1	2316.9	2316.8	2310.6
5°	2281.5	2258.4	2275.9	2284.0	2292.8
7.5°	2185.1	2167.1	2200.7	2225.9	2244.1
10°	2110.4	2094.9	2138.5	2172.9	2198.2
12.5°	2023.9	2012.0	2064.6	2111.8	2144.1
15°	1881.8	1875.2	1941.4	2006.6	2049.6
17.5°	1729.5	1729.3	1805.0	1885.9	1937.6
20°	1625.0	1628.3	1709.5	1798.7	1859.2
22.5°	1520.5	1528.2	1614.9	1707.9	1777.3
25°	1364.9	1375.9	1473.0	1573.8	1647.5
27.5°	1215.3	1231.4	1333.6	1438.3	1528.2
30°	1117.1	1135.8	1239.9	1350.1	1442.6
32.5°	1020.7	1043.0	1144.4	1260.9	1355.2
35°	876.1	898.1	995.5	1112.7	1214.0
37.5°	726.8	748.4	843.5	958.8	1068.2
40°	629.5	653.7	744.4	856.1	967.3
42.5°	541.2	565.4	650.7	760.5	865.5
45°	420.0	445.4	520.3	621.6	718.5
47.5°	319.6	347.1	412.8	504.5	592.8
50°	260.1	287.7	352.5	433.2	518.0
52.5°	212.4	239.0	297.5	373.6	451.4
55°	150.9	176.2	227.5	292.1	359.2
57.5°	104.3	126.1	172.1	226.0	278.6
60°	75.5	96.4	139.6	183.4	226.4
62.5°	50.2	69.4	111.7	145.3	174.1
65°	16.9	32.3	72.1	86.9	96.8
67.5°	8.6	10.3	37.8	39.9	43.2
70°	6.8	6.8	18.0	19.2	22.5
72.5°	5.0	5.0	7.2	9.2	9.9
75°	2.3	2.3	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.8	2.3	1.1	1.1
90°	1.4	4.2	11.5	5.7	5.7
92.5°	6.0	29.0	64.2	28.4	18.3
95°	14.3	56.4	187.7	96.7	65.9
97.5°	24.9	61.9	280.9	223.3	164.5
100°	33.0	66.6	309.5	313.7	243.6
102.5°	39.8	71.2	317.5	390.7	330.7
105°	51.6	78.2	316.7	480.7	448.5
107.5°	63.6	88.3	298.6	527.5	535.3
110°	71.6	94.1	283.7	539.5	573.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	79.7	101.0	270.0	531.9	583.5
115°	91.7	111.3	253.6	506.0	577.5
117.5°	103.5	121.4	242.5	470.1	549.4
120°	110.3	127.1	237.9	446.0	523.0
122.5°	117.2	134.0	234.4	421.9	497.8
125°	127.5	142.9	230.7	389.9	460.0
127.5°	135.8	151.5	227.5	364.2	423.3
130°	140.4	157.2	226.4	348.0	402.7
132.5°	145.0	161.8	225.3	334.1	383.2
135°	151.9	167.3	223.5	314.8	356.8
137.5°	159.1	174.2	223.3	300.3	334.7
140°	164.8	178.8	222.1	288.8	321.0
142.5°	169.4	182.3	222.1	280.6	308.4
145°	176.3	187.5	220.7	268.4	289.5
147.5°	183.1	194.1	220.7	258.3	275.7
150°	187.7	197.5	220.7	252.5	266.5
152.5°	192.3	199.9	220.7	247.9	258.5
155°	199.2	204.8	220.7	242.3	249.3
157.5°	204.3	209.7	220.7	237.4	242.5
160°	207.8	212.0	220.7	235.1	237.9
162.5°	211.2	214.3	220.7	232.8	235.6
165°	214.9	217.7	220.7	229.3	232.1
167.5°	218.4	219.8	222.1	227.9	229.0
170°	220.7	222.1	222.1	227.8	227.8
172.5°	221.8	222.1	222.1	226.7	225.5
175°	223.5	223.5	222.1	225.0	225.0
177.5°	223.5	223.5	222.4	224.7	223.5
180°	223.5	223.5	223.5	223.5	223.5

(END OF REPORT)